

Work Order ID 58398

May 5, 2010 2:28:38 PM



Page 1

Item ID: D2011-101

Accept

Revision ID:

Item Name: 6" Mirror

Start Date: 05/05/2010 Start Qty: 50.00

Required Date: 12/05/2010 Req'd Qty: 50.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: *W*

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2011

Rev G

100



Purchasing

Purchasing

PURCHASING

0.00

Memo

0.00

Issue P/O: *11835* ☐ Mirror P/N: CHM10601 ☐ Possible supplier:
Auto Parts Extra ☐ Material release note required

PL 10-5-05

110



Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

0.00

Memo

0.00

Ensure material certification is attached

PL 10-5-06 *(50)*

120



QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

Memo

0.00

8/20/10

center
(X20)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Date:

Run

Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Small Fab

Small Fab

Small Fab

Memo

1- Wrap mirror with plastic wrap

2- Discard Hardware & Install new hardware loosely

3- Crimp stud as per Dwg D2011

0.00

0.00

0.00

0.00

0.00

0.00

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

4- Test assembly to 50lbs pull test after 24 hours

150



Packaging

Packaging

Identify as per dwg & Stock Location: 231

Memo

50/06/08 (44) KTO

Count

(X44)

(46)

8.10.06/09

(X44)

BB 10/06/10

W/O: 58398		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
16.05.18	130	CRIMP TO DEPTH OF 0.026 ± 0.010.				 16.05.18 DS 042	 16.06.18

Part No: D2011-101 PAR #: _____ Fault Category: Small Fab NCR: Yes No DQA: Yes Date: 10.06.09
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: Yes Date: 10.07.15

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
16.05.18	130	6 minor Ball mount crack not even at the tolerance of .040 R & Process	 16.05.18 DS 042	SCRAP CRACKED MIRRORS Qty x6	 16/06/09	 16/06/09	 16.05.18 DS 042	 16/06/09
			 DS 042	- inform supplier of issue, over the phone with Auto PAK: their supplier Their material has not changed For the request Ball mount. Supplier does not have e-mail, so cannot attach their	 16.06.09	 16/06/09	 DS 042	 16/06/09

NOTE: Date & initial all entries

Work Order ID 58398

May 5, 2010 2:28:38 PM



Page 3

Item ID: D2011-101

Accept



Setup Start



Revision ID:

Item Name: 6" Mirror

Stop



Start Date: 05/05/2010 Start Qty: 50.00



Cust Item ID:

Required Date: 12/05/2010 Req'd Qty: 50.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21 - Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/06/10

M 10-6-10

(H/4)

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

May 5, 2010 2:28:44 PM

Page 1

Work Order ID: 58398

Parent Item: D2011-101

Parent Item Name: 6" Mirror

Comments: IPP: J 04.09.15 Added Steps 5-7 KJ/JLM IPP:
K 05.12.15 chg black sikaflex for white EC IPP L 08.11.06 new
drawing EC verify: DD IPP: M 08.12.19 Added step 3 KJ Verified
by: LL IPP rev N 10.01.13 added wrap per ncr09-118 EC verified by:DD

Start Date: 05/05/2010

Required Date: 12/05/2010

Start Qty: 50.00

Required Qty: 50.00

AN960JD416L

Purchased No

110

Each

477.0000

1



Washer Q51017

NAS1149D04162

M114103

(504)

Location

ST346

110153

Loc Qty

477

477

Loc Code

CHM-10601

Purchased No

130

Each

0.0000

1



Mirror 6"

D2829



Threaded Stud

Manufactured No

130

Each

4.0000

1

Location

ST025

54930

56986

Loc Qty

4

2

2

Loc Code

D3014-1

Manufactured No

130

Each

347.0000

1



Locknut

Location

ST033

18605

Loc Qty

347

347

Loc Code



E50/06/08



E50/06/08



E50/06/08
B58567 (44)



E50/06/08

44

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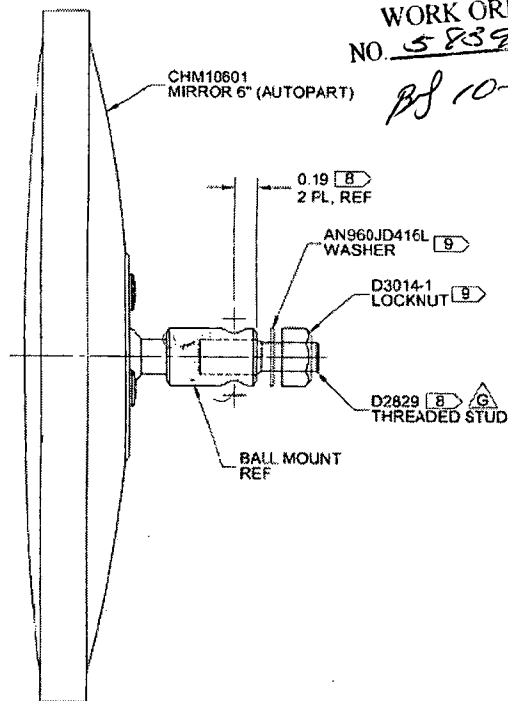
NOTE: Date & initial all entries

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

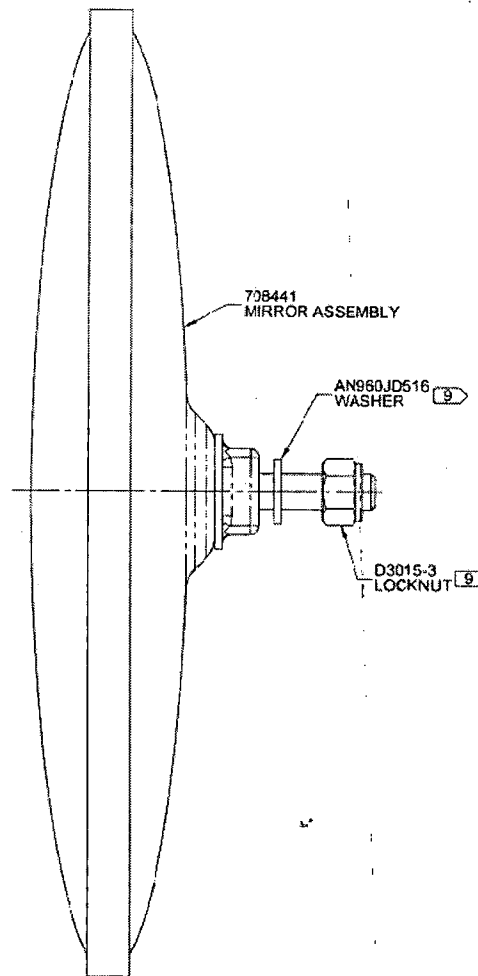
WITHOUT NOTICE
WORK ORDER

NO. 5839F

BJ 10-5-05



D2011-101 MIRROR ASSEMBLY 6"



D2011-103 MIRROR ASSEMBLY 8"

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2011-101 = 0.6 lbs APPROX.; D2011-103 = 1.0 lbs APPROX.
- 8) D2829 INSTALLATION PROCEDURE:
 - APPLY LOCKTITE 262 TO Ø5/16 END OF D2829
 - THREAD BY HAND INTO BALL MOUNT UNTIL ENTIRE Ø5/16 END OF D2829 IS WITHIN BALL MOUNT
 - CRIMP BALL MOUNT ON TWO OPPOSING SIDES, 0.19 FROM END AS ILLUSTRATED USING TOOL DT8317
 - CRIMP TO DEPTH OF 0.040 ± 0.010 USING R0.125
- 9) INSTALL LOOSE

0.020 ± 0.010

CP 10.05.18

ITEM	QTY -101	QTY -103	P/N	DESCRIPTION
1	X		D2011-101	MIRROR ASSEMBLY 6"
2		X	D2011-103	MIRROR ASSEMBLY 8"
3	1		D2829	THREADED STUD
4	1		D3014-1	LOCKNUT
5		1	D3015-3	LOCKNUT
6	1		CHM10601	MIRROR 6" (AUTOPART)
7		1	708441	MIRROR 8" (VELVAC)
8	1		AN960JD416L	WASHER
9		1	AN960JD516	WASHER

RELEASED
(X 10-2-11)

G	REDDRAWN IN SOLIDWORKS TO CURRENT STANDARD AND TRANSFERRED TO "B" SIZE FORMAT. MIRROR 6" (AUTOPART) AND CHM10601 WERE MIRROR 6" (GROTE) AND P/N 28043 (ZN D3-1). ADDED D2829 (ZN D3-1 AND ZN D3-1). REMOVED DRILLING NOTE. VIEW A-A AND SIKAFLEX APPLICATION NOTE. REASON: GROTE PRODUCT IS DISCONTINUED	MB	08.10.06
F	ADD HOLES FOR SEALANT ON -101	CP	04.09.10
E	NEW 6" MIRROR	CP	01.05.08
D	NEW 6" MIRROR, ADD NUT, REMOVED STUD	CP	01.04.23
C	REPLACE DOMINION AUTO MIRRORS WITH PHILLIPS, ADDED STUDS, REDRAWN	RF	99.06.01
B	SIKAFLEX 241 ADDED	JB	98.04.09
A	DWG NO. WAS DSP1011, ADDED -103	JB	90.06.15
-	NEW ISSUE	JB	90.03.31
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. G
MFG. APPR	<i>[Signature]</i>	D2011	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR	<i>[Signature]</i>	MIRROR ASSEMBLY	NTS
DATE	08.10.06	COPYRIGHT © 1990 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED TO THE BUYER UNDER CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO11835

Purchase Order Date 05/05/2010

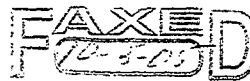
PO Print Date 05/05/2010

Page Number 1 of 1

Order From :

VC-AUT001

AUTO PARTS EXTRA
1000 RUE LANSDOWNE
HAWKESBURY, ON K6A 1H7
CA



Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

613 632 1191

613 632 2350

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Brigitte Golden

10127-2607

Net 30

CAD

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	CHM-10601	Mirror 6"	07/05/2010 Yes	50.00 Each	Yours ppd	\$18.9500	\$947.50

Special Inst: As per DWG: D2011 Rev: G
B# 58398

PO Total:

\$947.50

Change Nbr: 1

Change Date: 05/05/2010

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable



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TRUCK PARTS • PIÈCES DE CAMION
PERFORMANCE PARTS • PIÈCES DE PERFORMANCE
TIRES • PNEUS**

www.bensonautoparts.com



19336 Past due accounts bear 2% interest per month (24% per annum). If this account is placed with a 3rd party collection, an administrative cost of 25% will be added. All exchanges and refund claims must be accompanied by this invoice. Electrical parts not returnable. All parts returned are subject to 20% handling charge. All merchandise sold on this invoice remains the vendor's property until this invoice is paid in full.

TERMS: Payment due on 10th day of the following month.

Aucun remboursement sans cette facture. Net 30 jours. 2% de frais d'intérêt par mois (24% par année, sur compte en souffrance. 20% de frais de manutention sur toute marchandise retournée. Clause pénale: une indemnité de 25% sera chargée sur compte sujet à des procédures légales. Les marchandises mentionnées sur cette facture demeurent la propriété du vendeur tant qu'elles ne seront pas entièrement payées. Pièces électriques non-retournable.

TERMS: Compte payable le 10 du mois suivant.

SIGNATURE _____

GST / TPS
10035 3366 RT0001

1000 RUE LANDSDOWNE
TEL: (613)632-1191

HAWKESBURY, ON K6A 1H7
FAX: (613)632-2350

TVQ
1016330716 TQ0001

113336 (613)632-5200
DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY ON K6A 1K7

EXPEDIER
SHIP TO
A

113336

*** SAME ***

Scolostio

DATE: 5/07/10
08:00
11MMLP

PO: 11835

ORD / COM	SHIP / EXP	CODE	PART No / PIÈCES	DESCRIPTION	LIST EACH / CHACUN	COST / COUTANT	EXTENSION
50	50	TWD	CHM10601 ✓ twd / 73187.00	6 CONV. MIRROR, S/ BOV: TWD	10.23	18.95	947.50
	50	***	SHIP VIA	PIECES/CORE TOT 243	0.00		0.00
INVOICE No / FACTURE 11012112		TYPE / SORTE INVOICE		TOTAL 947.50	DISC / ESC 0.00	FRT / TRANS 0.00	GST / TPS 47.38
						PST / TVQ 0.00	AMT to PAY / A PAYER 994.88

Benson Auto parts,
632-1191

can track
more leave.



→ they order from TWD distributor

→ 1800-361-7816

Stephane. -TWD

HD Plus. → mirror manufacturer.

-TWD - Stephane. on Mon 19 @ 10:10am?

→ will call back later. He will try to find out the ball stud material type.

→ Ball mount material. → 1. Grinded. material only.

Jason Murdoch

From: Dan Stow [dstow@dartaero.com]
Sent: Tuesday, May 18, 2010 1:16 PM
To: 'Mike Petsche'; 'Jason Murdoch'
Cc: 'L Lacelle'; 'David Shepherd'
Subject: AOG!!! No-charge for Heliproducts

Importance: High

Mike,

Mike from Heliproducts gave me a call concerning the D350-764-011 kit. On page 17 in the IIN a coarse threaded screw (MS35206-267) is called for when it should be a fine threaded screw (MS35207-267). The customer needs DAS to send him the properly threaded screws ASAP but of course we do not have it in stock. Is there a substitute that can be sent?

The customer made the comment that he has installed this kit before and received the correct screw but when I check all of the documents it appears the error has always been there.

Jason – please issue a PAR to investigate.

Dan Stow
Technical Support
Dart Aerospace Ltd.
dstow@dartaero.com
p:613.632.5200
c:613.676.0992

Eric Downing

From: Jason Murdoch [jmurdoch@dartaero.com]
Sent: June 4, 2010 7:18 AM
To: 'L Lacelle'
Cc: 'Eric Downing'; 'Chantal Lavoie'; mfauteux@dartaero.com
Subject: RE: 6" mirrors

To back this e-mail up, I would also get engineering approval for deviating from the drawing.

Jason Murdoch
Quality Coordinator
jmurdoch@dartaero.com
DART Aerospace Ltd.
613-632-5200

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: Friday, June 04, 2010 7:17 AM
To: 'L Lacelle'
Cc: 'Eric Downing'; 'Chantal Lavoie'; mfauteux@dartaero.com
Subject: RE: 6" mirrors

I never received an answer back for the ball mount material. I would say scrap all the cracked mirrors, & anything that is extremely crushed to avoid any cracking. As for the rest, I would say press to half of the drawing requirements. The stud does not need a lot to stay in place.

Jason Murdoch
Quality Coordinator
jmurdoch@dartaero.com
DART Aerospace Ltd.
613-632-5200

From: L Lacelle [mailto:llacelle@dartaero.com]
Sent: Thursday, June 03, 2010 11:52 AM
To: 'Jason Murdoch'
Cc: 'Eric Downing'; 'Chantal Lavoie'; mfauteux@dartaero.com
Subject: 6" mirrors
Importance: High

What's happening with these???????

Thank You,
Linda Lacelle
Production Manager
Dart Aerospace Ltd

04/06/2010

W/O:			WORK ORDER CHANGES					
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